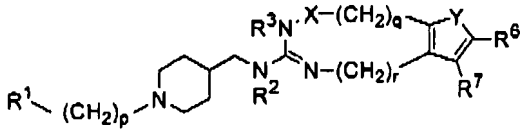
Supplemental Amendment under 37 C.F.R. § 1.111 Q84084
Application No. 10/511,174

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A compound represented by the following formula (I):



(I)

wherein R^1 represents phenyl, C_3-C_8 cycloalkyl or an aromatic heterocyclic group having 1-3 atoms selected from the group consisting of oxygen, sulfur and nitrogen as hetero atoms,

the phenyl or aromatic heterocyclic group of R^1 may optionally fuse with a benzene ring or aromatic heterocyclic group having 1-3 atoms selected from the group consisting of oxygen, sulfur and nitrogen as hetero atoms to form a fused ring,

the phenyl, C_3-C_8 cycloalkyl or aromatic heterocyclic group, or fused ring, in R^1 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, cyano, nitro, carboxyl, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_2-C_6 alkenyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_3-C_5 alkylene, C_2-C_4 alkyleneoxy, C_1-C_3 alkylenedioxy, phenyl, phenoxy, phenylthio, benzyl, benzyloxy, benzoylamino, formyl, C_2-C_7 alkanoyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoyloxy, C_2-C_7 alkanoylamino, C_1-C_6 alkylsulfonyl, C_3-C_8 (alkoxycarbonyl)methyl, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_4-C_9 N-cycloalkylcarbamoyl, N-phenylcarbamoyl, piperidylcarbonyl,

morpholinylcarbonyl, pyrrolidinylcarbonyl, piperazinylcarbonyl, N-methoxycarbamoyl, (formyl)amino and ureido, and

the substituent of the phenyl, C_3-C_8 cycloalkyl or aromatic heterocyclic group, or fused ring, of R^1 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, phenyl, C_3-C_5 alkylene, C_3-C_8 cycloalkyl, C_3-C_8 cycloalkenyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, pyrrolidinyl, piperidyl, C_3-C_7 lactam, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_2-C_7 alkoxycarbonyl, carboxyl, hydroxy, benzoyl, cyano, trifluoromethyl, halogen and *tert*-butoxycarbonylamino,

provided that when R^1 is C_3-C_8 cycloalkyl, the substituent does not include amino, mono(C_1-C_6 alkyl)amino or di(C_1-C_6 alkyl)amino;

p represents an integer of 1-6;

R^2 and R^3 may be the same or different and each independently represents hydrogen, C_1-C_6 alkyl or phenyl,

where the C_1-C_6 alkyl or phenyl group of R^2 and R^3 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, C_1-C_6 alkyl, C_2-C_7 alkoxycarbonyl, amino, carbamoyl, carboxyl, cyano and C_1-C_6 alkoxy;

X represents -CO-, -SO_2-, -CH_2-, -CS- or a single bond;

q represents 0 or 1;

r represents 0 or 1;

Y represents -(R^4)C=C(R^5)-, -S- or -NR^8-;

R^4, R^5, R^6 and R^7 may be the same or different, and each independently represents hydrogen, a halogen, hydroxy, cyano, nitro, carboxyl, C_1-C_6 alkyl, C_3-C_8 cycloalkyl, C_2-C_6 alkenyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, C_3-C_5 alkylene, C_2-C_4 alkyleneoxy, C_1-C_3 alkylenedioxy, phenyl, phenoxy, phenylthio, phenylsulfonyl, benzyl, benzyloxy, benzoylamino, formyl, C_2-C_7 alkanoyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoyloxy, C_2-C_7 alkanoylamino, C_4-C_{10} cycloalkanoylamino, C_3-C_7 alkenoylamino, C_1-C_6 alkylsulfonyl, C_1-C_6 alkylsulfonylamino, C_3-C_8 (alkoxycarbonyl)methyl, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_4-C_9 N-cycloalkylcarbamoyl, N-phenylcarbamoyl, N-(C_7-C_{12} phenylalkyl)carbamoyl, piperidylcarbonyl, morpholinylcarbonyl, pyrrolidinylcarbonyl, piperazinylcarbonyl, N-methoxycarbamoyl, sulfamoyl, C_1-C_6 N-alkylsulfamoyl, (formyl)amino, (thioformyl)amino, ureido or thioureido,

where the aforementioned groups of R^4, R^5, R^6 and R^7 each may be independently unsubstituted, or substituted with one or more substituents selected from the group consisting of C_1-C_6 alkyl, C_2-C_6 alkenyl, C_2-C_6 alkynyl, phenyl, C_3-C_5 alkylene, C_3-C_8 cycloalkyl, C_3-C_8 cycloalkenyl, C_1-C_6 alkoxy, (C_1-C_6 alkoxy)(C_1-C_6 alkoxy), phenyl(C_1-C_6 alkoxy), C_1-C_6 alkylthio, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino, pyrrolidinyl, piperidyl, (C_2-C_7 alkanoyl)piperidyl, C_3-C_7 lactam, carbamoyl, C_2-C_7 N-alkylcarbamoyl, C_4-C_9 N-cycloalkylcarbamoyl, N-phenylcarbamoyl, N-(C_7-C_{12} phenylalkyl)carbamoyl, C_2-C_7 alkanoylamino, C_2-C_7 alkoxycarbonyl, carboxyl, hydroxy, benzoyl, cyano, trifluoromethyl, halogens, *tert*-butoxycarbonylamino, C_1-C_6 alkylsulfonyl and heterocycles or aromatic heterocycles (where a heterocycle or aromatic heterocycle has 1-3 atoms selected from the group

consisting of oxygen, sulfur and nitrogen as hetero atoms, and may be substituted with C_1-C_6 alkyl); and

R^8 represents hydrogen or C_1-C_6 alkyl,

where the C_1-C_6 alkyl group of R^8 may be unsubstituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, cyano, nitro, carboxyl, carbamoyl, mercapto, guanidino, C_3-C_8 cycloalkyl, C_1-C_6 alkoxy, C_1-C_6 alkylthio, phenyl (where phenyl may be substituted, or substituted with one or more substituents selected from the group consisting of halogens, hydroxy, C_1-C_6 alkyl, C_1-C_6 alkoxy and benzyloxy), phenoxy, benzyloxy, benzyloxycarbonyl, C_2-C_7 alkanoyl, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoyloxy, C_2-C_7 alkanoylamino, C_2-C_7 N-alkylcarbamoyl, C_2-C_6 alkylsulfonyl, amino, mono(C_1-C_6 alkyl)amino, di(C_1-C_6 alkyl)amino and ureido,

a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof.

2. (original): A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is $-SO_2-$.

3. (original): A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is -CO-.

4. (original): A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is $-CH_2-$.

5. (original): A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is -CS-.

6. (original): A compound according to claim 1, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein X in formula (I) is a single bond.

7. (original): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y in formula (I) is $-(R^4)C=C(R^5)-$.

8. (original): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y in formula (I) is -S-.

9. (original): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y in formula (I) is $-NR^8-$.

10. (previously presented): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^1 in formula (I) is substituted or unsubstituted phenyl.

11. (previously presented): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^2 in formula (I) is hydrogen.

12. (previously presented): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^3 in formula (I) is hydrogen.

13. (previously presented): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein q=0 and r=0 in formula (I).

14. (previously presented): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein q=1 and r=0 in formula (I).

15. (previously presented): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein q=0 and r=1 in formula (I).

16. (previously presented): A compound according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein p=1 in formula (I).

17. (original): A compound according to claim 2, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is -$(R^4)C=C(R^5)$-, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I).

18. (original): A compound according to claim 3, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is -

$(R^4)C=C(R^5)$-, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I).

19. (original): A compound according to claim 4, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is -$(R^4)C=C(R^5)$-, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I).

20. (original): A compound according to claim 6, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein Y is -$(R^4)C=C(R^5)$-, R^1 is substituted or unsubstituted phenyl, R^2 is hydrogen, R^3 is hydrogen, q=0, r=0 and p=1 in formula (I).

21. (original): A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^4 and R^5 in formula (I) may be the same or different and each is independently hydrogen, a halogen, hydroxy, cyano, nitro, carboxyl, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_2-C_7 alkoxycarbonyl, C_2-C_7 alkanoylamino, C_1-C_6 alkylsulfonyl, amino, carbamoyl, C_2-C_7 N-alkylcarbamoyl, sulfamoyl or C_1-C_6 N-alkylsulfamoyl.

22. (original): A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein R^4 and R^5 in formula (I) may be the same or different and each is independently a halogen, hydroxy, cyano, nitro, C_1-C_6 alkyl, C_1-C_6 alkoxy, C_2-C_7 alkoxycarbonyl, C_1-C_6 alkylsulfonyl or C_1-C_6 N-alkylsulfamoyl.

23. (previously presented): A compound according to any one of claims 17 to 20, a pharmaceutically acceptable acid adduct thereof, or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof, wherein the substituents of R^1 in formula (I) above may be the same or different and is independently a halogen, hydroxy, cyano, nitro, C_1-C_6 alkyl or C_1-C_6 alkoxy.

24. (previously presented): A pharmaceutical composition with CCR3 antagonism, which comprises as an effective ingredient thereof a compound represented by formula (I) above according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof; and a pharmaceutically acceptable carrier.

25. (currently amended): A method for treatment of a disease or condition selected from the group consisting of bronchial asthma, allergic rhinitis, atopic dermatitis, urticaria, contact dermatitis, allergic conjunctivitis, inflammatory bowel disease, Acquired Immune Deficiency Syndrome, eosinophilia, eosinophilic gastroenteritis, eosinophilic enteropathy, eosinophilic fasciitis, eosinophilic granuloma, eosinophilic pustular folliculitis, eosinophilic pneumonia and eosinophilic leukemia ~~prophylaxis and/or treatment of a disease associated with CCR3, which comprises~~ comprising administering an effective amount of a compound represented by formula (I) according to any one of claims 1 to 6, a pharmaceutically acceptable acid adduct thereof or a pharmaceutically acceptable C_1-C_6 alkyl adduct thereof.

26 - 30 (canceled).